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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,229

09/24/2003

Junichiro Osako

XA-9932

2049

181

7590

05/21/2004

MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

TAYLOR, APRIL ALICIA

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,229

Applicant(s)

OSAKO ET AL.

Examiner

April A. Taylor

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of the Preliminary Amendment filed 24 September 2003. Claims 12-24 have been canceled. Claims 1-11 are now pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The abstract of the disclosure is objected to because it contains legal phraseology such as "comprises" (see line 5). Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 2 is objected to because of the following informalities: Substitute ":" with --; -- (see lines 4 and 7, respectively). Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-...are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda et al (US 6,433,285), (hereinafter Maeda).

Re claims 1, 3, 7, and 10: Maeda teaches an IC card comprising a semiconductor device having a semiconductor chip at least partially sealed with a first sealing portion made of a thermosetting resin material and having, over a first surface, an external connection terminal electrically connected to the semiconductor chip; a case which is made of a thermoplastic resin material and to which the semiconductor device is to be loaded; and a second sealing portion which is made of a thermoplastic resin material and seals the semiconductor device so as to expose the external connection terminal, thereby integrating the semiconductor device with the case (see col. 5, line 15 to col. 9, line 64).

Re claim 2: Maeda teaches wherein the semiconductor device comprises a wiring substrate having the external connection terminal and an interconnect; the semiconductor chip disposed over the wiring substrate and electrically connected to the external connection terminal via the interconnect; and the first sealing portion made of a thermosetting resin material and formed over the wiring substrate so as to seal the semiconductor chip at least partially (see col. 5, line 15 to col. 9, line 64).

Re claim 4: Maeda teaches wherein the semiconductor device has a connecting member for electrically connecting the interconnect of the wiring substrate with the

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semiconductor chip, and the first sealing portion covers the connecting member (see col. 5, line 15 to col. 9, line 64).

Re claim 5: Maeda teaches wherein the semiconductor chip is disposed over a surface of the wiring substrate on a side opposite to a surface over which the external connection terminal is formed (see col. 5, line 15 to col. 9, line 64).

Re claim 6: Maeda teaches wherein the second sealing portion is formed to cover a region, other than the external connection terminal, of the first surface of the semiconductor device (see col. 5, line 15 to col. 9, line 64).

Re claim 8: Maeda teaches wherein the second sealing portion is welded with the interface portion of the case (see col. 5, line 15 to col. 9, line 64).

Re claim 9: Maeda teaches wherein a projecting portion is formed over the first surface of the semiconductor device, the external connection terminal is formed over the projecting portion of the first surface, and the second sealing portion is formed to cover a region, other than the projecting portion, of the first surface of the semiconductor device (see col. 5, line 15 to col. 9, line 64).

Re claim 11: Maeda teaches wherein the semiconductor device comprises a die pad portion; the semiconductor chip disposed over the die pad portion; a lead portion; and the first sealing portion covering the die pad portion, the semiconductor chip and the lead portion and exposing a part of the lead portion from the outer surface of the first sealing portion (see col. 5, line 15 to col. 9, line 64).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Usami et al (US 2002/0027274) discloses a semiconductor device and fabrication method.

Okamura et al (US 6,591,494) discloses a method for manufacturing a non-contact type IC card.

Takahashi (US 6,031,724) discloses an IC card and method of manufacturing.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to April A. Taylor whose telephone number is (571) 272-2403. The examiner can normally be reached on Monday - Friday from 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [april.taylor@uspto.gov].

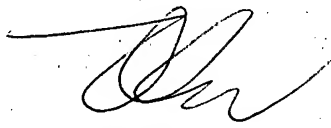
All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the

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confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


April Taylor
17 May 2004


THIEN M. LE
PRIMARY EXAMINER